OF THE DISCLOSURE

A layer of polyimide or polysilicon is used as a mask in vapor hydrogen fluoride etching. Both non-photosensitive and photosensitive type polyimide may be used. A non-photosensitive polyimide mask requires the use of photoresist for patterning with a lithographic mask. Alternatively, photosensitive type polyimide may be patterned directly with the use of a lithographic mask. The resulting polyimide mask enables the etching of very small features with great uniformity. Such etching may be used to expose micropoint emitters of field emission devices.